ABSTRACT OF THE DISCLOSURE

A glass structure, such as a mirror facet, having a glass member, a composite structure and a support structure. The composite structure includes a rigid interlayer which is bonded to the glass member and exerts a compressive force thereon to place the glass member in compression. The support structure is used to mount the glass structure and prevents the glass member from collapsing due to the compressive force exerted by the rigid interlayer. The glass structure is particularly well adapted for use in forming heliostats, parabolic dishes, trough concentrators, or other like elements for use in solar power systems, and does not suffer from the limitations or prior forms of such devices.